

CLAIMS

1.-32. (cancelled)

33. An electronic product comprising:

a substrate;

a battery;

a substantially non-conductive composition arranged on the substrate and having a first color;

a substantially conductive composition having a second color that matches the first color, the conductive composition being arranged on the non-conductive composition and forming an open circuit area thereon; and

an electronic circuit element connected to the conductive composition, the electronic circuit element also being electrically connected to the battery through the conductive composition upon closing of the open circuit area.

34. The electronic product of claim 33, wherein the non-conductive composition forms a first path having a first width and the conductive composition forms a second path having a second width, the first width being at least as wide as the second width.

35. The electronic product of claim 34, wherein the first path has a width of approximately 1 mm.

36. The electronic product of claim 33, wherein the conductive and non-conductive compositions comprise ink.

37. The electronic product of claim 33, wherein the conductive composition includes a predetermined amount of silver.

38. The electronic product of claim 33, wherein the conductive composition comprises a predetermined amount of carbon.

39. An electronic product comprising:

a substrate;

a non-conductive composition arranged on the substrate;

a conductive composition arranged on a portion of the non-conductive composition, the conductive composition forming a gap through which the non-conductive composition is visible, the conductive and non-conductive compositions having substantially the same color so that the combination of the two compositions appear to be continuous across the gap;

a circuit module connected to the conductive composition; and

a battery electrically connected to the conductive composition and the circuit module whereby the circuit module is operable when a closed circuit condition is caused by placing a conductive object across the gap of the conductive composition.

40. The electronic product of claim 39, wherein the conductive and non-conductive compositions have substantially the same width.

41. The electronic product of claim 39, wherein the conductive and non-conductive compositions comprise ink.

42. The electronic product of claim 39, wherein the non-conductive composition has a resistance of at least 100 MΩ.

43. An electronic product comprising:

a substrate;

a battery;

a layer of substantially non-conductive ink having a predetermined color printed on the substrate; and

a layer of conductive ink having substantially the same color as the non-conductive ink, the conductive ink being arranged on top of a portion of the non-conductive ink and being connected to the battery, the conductive ink forming at least one open circuit switch area that can be selectively closed upon contact with a conductive element.

44. The electronic product of claim 43, wherein the non-conductive ink is arranged across the at least one open circuit switch area so that the at least one open circuit switch area has a continuous visual appearance.

45. The electronic product of claim 44, wherein the non-conductive and conductive inks are printed with substantially uniform widths, the width of the non-conductive ink being at least as large as the width of the conductive ink.

46. The electronic product of claim 45, further comprising an electronic circuit element connected for electrical communication with the conductive ink and the battery.

47. The electronic product of claim 46, wherein the electronic circuit element comprises a light emitting diode.

48. The electronic product of claim 46, wherein the electronic circuit element comprises a sound module.